

Automata Manufacturing Project



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Part I: Overview of Business

- RC is an engineering and manufacturing facility based in Cedar Rapids
- RC designs and builds electronic components for commercial and military airplanes

Part II: Job Specifics

- Working as an Engineering Co-Op I was part of a team that designed new kits of supplies that will be manufactured.
- We were responsible for implementing a flow of kits to the many locations within RC
- Our job was vital to ensure increased production by reducing material down time, waste, and improve efficiency

Part III: Introduce the Problem

- Intro to Engineering students will identify what product needs to be built for their Automata project and research any important information about it
- Determine what materials and equipment will be needed
- Collaborate and decide on the most efficient way to mass produce the product while allowing for individual modifications

Part IV: Background

- Research possible ways to design and build the part
- Create Spaghetti Diagrams and Value Stream Maps
- Understand how a manufacturing facility operates and the value of reducing waste

Part V: Business Solution

- The entire team works together to find ways to improve efficiency and production of product

Part VI: Student Solutions

- Unique Automata designs
- Creative ways to use materials and equipment
- Ways to use this process outside the classroom